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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RUHL, DENNIS WILLIAM

ART UNIT

PAPER NUMBER

3629

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/002,129	Applicant(s) CONNELLY, JAY H.	
	Examiner Dennis Ruhl	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's response of 10/25/07 has been entered. Currently claims 1-49 remain as pending. The examiner will address applicant's arguments at the end of this office action.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6,11,13-49, are rejected under 35 U.S.C. 102(e) as being anticipated by Schaffer et al. (6934964).

For claims 1,13,20,26,30,34,38,42,46, Schaffer disclose a method and computer system where user preferences are obtained concerning television programs, or books or web sites, etc., and recommendations are made to the user based on the user preferences. The obtaining of a plurality of consumer preferences is disclosed numerous times in the patent, as an example see column 5, lines 1-19, as well as the background of the invention portion. Also see column 3, line 45 to end of column 4. With respect to the language reciting that the preferences are determined at least in part by consumer information that is linked to either a telephone number or an address, that is also associated with billing information that is associated with the set top box, this is present in Schaffer. The information that the system tracks and acquires about the

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viewing habits of a user satisfies what is claimed. The "viewing habits" is consumer information because it is information about the user and what they like or dislike. This consumer information (viewing habits) is linked to either a telephone number or an address that is associated with billing information associated with a set top box, because both sets of data are for the name of the person who owns or pays for the set top box. In Schaffer, consumer data is collected by the set top box and preferences are determined based on that data, just as is disclosed in the instant specification. The consumer information that is collected is inherently and necessarily linked to billing information (address to where bill is sent and phone number) because that data is reflective of the preferences of the person that pays the bills for the set top box. The claim is still just reciting that the ordered list is based on evaluating consumer information, just as is disclosed by Schaffer. Additionally, reciting that the preferences are determined based on consumer information (broad term itself), that is linked to an address or telephone number that is associated with billing information (another broad term itself), is not seen as reciting any specific kind of data that is being used. This is very broad language. The viewing habits of a consumer is inherently linked to the address and phone number where the set top box is located, which is necessarily associated to billing information. Applicant's most recent amendment has not changed the scope of the claim in the opinion of the examiner. The prior art satisfies what is claimed. The receiving a schedule from a server listing available products is disclosed in column 9, lines 47-58. It is disclosed that computer 240 (a set top box) receives program information via a data link 260. The data comes from a server as claimed and

includes programs currently running and ones coming up. The creation of an ordered list is disclosed in column 5, lines 49-53. The preference engine displays a list of recommended programs. The list of recommended programs is inherently in an order, as a list necessarily has to have some order to it. Also, it is disclosed in column 4, lines 65-67, that the programs receive a ranking of how much the user likes the program. The programs are ranked based on the relevance to the user and their preferences. For the recited structure to the system (claim 26) see figure 4, which shows a user input device 210, television monitor 230, set top box 240. The set top box inherently has a processor, one is necessarily required for the set top box to operate. The memory is 235, communication interface 260, output controller (the control of the signal to the television monitor, i.e. video out), user input controller 215.

For claims 2,14,15,21,22,27,31,35,39,43,47, the preferences include both implicit and explicit. The implicit preferences are referred to as the 1st type (disclosed in column 2), and the explicit are referred to as the 2nd type (disclosed in column 2). Also, Schaffer discloses that the computer 240 can be preloaded with user preference information and that the system will also monitor the viewing habits of the user to augment the preferences with historical data relating to what the user watched. For example, see column 5, lines 1-19 and column 9, lines 54-57.

For claims 3,16, see column 6, lines 37-48; column 10, lines 10-13; and column 14, lines 56-67, where the claimed limitations are disclosed.

For claims 4,17,23,28,32,36,40,44,48, see column 5, lines 49-53 where the claimed limitations are disclosed.

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For claims 5,18,24, see column 9, lines 1-28, where the claimed limitation is disclosed.

For claims 6,11,19,25,29,33,37,41,45,49, Schaffer discloses what is claimed. The ratings vectors are the rankings assigned to various programs, such as is disclosed in column 4, lines 65-67. Having rankings based on numbers satisfies ratings vectors. The predictive vectors are the results that the predictive engine comes up with to base the recommendations on. Each program is rated based on the preferences and a prediction is made to whether or not the user will like the program, and some predicted programs are rated higher than others. This satisfies the claimed "predictive vectors". The ordering of the products is satisfied by the user selecting a recommended program that they desire to view. The product description data is inherently used as claimed because this is what defines the content of the program.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-10,12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffer et al. (6934964) in view of Ismail et al. (6614987).

For claims 7-10,12, not disclosed is that a reference magnitude and a preference magnitude are evaluated and that a standard deviation is determined for key/value pairs. In Schaffer at column 6, lines 3-14 it is disclosed that the manner of determining

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preferences/recommendations can be done by any of numerous types of pattern-discovery techniques. Schaffer is disclosing that the methodology used to determine preferences and make recommendations can be varied. Ismail discloses a technique for determining user television viewing preferences and for making recommendations to the user. Ismail is very similar to Schaffer in that both are using user preferences to make recommendations of programs to users. Ismail discloses that for each program there are category-value pairs (the claimed key/value pairs) that are used to determine a rating for each program (a reference magnitude). This is then compared to user preferences (a preference magnitude) to determine a recommendation rating (ranking/relevance/sorting) for the programs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the technique of Ismail in the system and method of Schaffer, to determine key/value pairs and to evaluate reference and preference magnitudes so that accurate recommendations can be obtained. With respect to the use of standard deviation, this is not taught explicitly; however, the use of standard deviation (statistical analysis) in analyzing collections of data is very old and very well known in the art. One of ordinary skill in the art at the time the invention was made would have found it obvious to use the well-known statistical analysis technique of standard deviation to determine how some of the data varies from what was expected.

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6. Applicant's arguments filed 10/25/07 have been fully considered but they are not persuasive. Applicant has argued that the newly added language to the claims renders them allowable, although no real explanation has been provided as to why or how the prior art does not satisfy the new language. With respect to the language reciting that the preferences are determined at least in part by consumer information that is linked to either a telephone number or an address, that is also associated with billing information that is associated with the set top box, this is present in Schaffer. The information that the system tracks and acquires about the viewing habits of a user satisfies what is claimed. The "viewing habits" is consumer information because it is information about the user and what they like or dislike. This consumer information (viewing habits) is linked to either a telephone number or an address (actually both) that is associated with billing information associated with a set top box, because both sets of data are for the name of the person who owns or pays for the set top box for a given address or phone number. In Schaffer, consumer data is collected by the set top box and preferences are determined based on that data, just as is disclosed in the instant specification. The consumer information that is collected is inherently and necessarily linked to billing information (address to where bill is sent and phone number) because that data is reflective of the preferences of the person that pays the bills for the set top box. The claim is still just reciting that the ordered list is based on evaluating consumer information, just as is disclosed by Schaffer. Additionally, reciting that the preferences are determined based on consumer information (broad term itself), that is linked to an address or telephone number that is associated with billing information (another broad

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term itself), is not seen as reciting any specific kind of data that is being used. This is very broad language. The viewing habits of a consumer is inherently linked to the address and phone number where the set top box is located, which is necessarily associated to billing information. Applicant's most recent amendment has not changed the scope of the claim in the opinion of the examiner. The prior art satisfies what is claimed. Applicant has only alleged that the claims define patentable subject matter and has not offered any substantive discussion of the prior art and how the new language defines over what the prior art discloses. The examiner also notes that all of the dependent claims and the 103 rejection in view of Ismail has not been addressed on the merits, so the rejections are deemed to be proper (37 CFR 1.111).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 571-272-6808. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DENNIS RUHL
PRIMARY EXAMINER